

**Notice of Allowability**

Application No.

10/707,852

Applicant(s)

IRELAND ET AL.

Examiner

Cam Y T. Truong

Art Unit

2162

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/13/2006.
2. ☒ The allowed claim(s) is/are 1-6,8,10-20,22-29,31 and 33-41.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
Cam Y Truong  
Primary Examiner  
Art Unit: 2162

### **DETAILED ACTION**

1. Applicant has amended claims 1, 6, 23, 24 and 29 and canceled claims 7, 30, and 43-62 in the amendment filed on 9/13/2006.

Claims 1-6, 8-29, 31-42 are pending in this Office Action.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John A. Smart, Registration No. 34,929 on 9/28/2006.

In the claims:

Please replace claims 1-3, 13, 16, 17, 20, 22, and 24 with the amended claims 1-3, 13, 16, 17, 20, 22, and 24.

Please cancel claims 9, 21, 32 and 42.

1. (Currently amended) A method for executing a database statement, the method comprising:
  - preparing at least one template capable of generating an executable statement for execution against a database via a particular database connection;
  - storing the at least one template in a shared cache at an application server so that the at least one template is available to a plurality of database connections, such that memory requirements of the shared cache are proportional to how many templates exist, regardless of how many executable statements are generated;
  - in response to a request to execute a particular statement on a given database connection, determining whether a first template for the particular statement is available in the shared cache;
  - if the first template is unavailable in the shared cache, preparing a second template for execution of the particular statement against the database and placing the second template in the shared cache;
  - once the first template is available in the shared cache, creating a corresponding executable statement based on the first template, the executable statement having been prepared for execution on the given database connection;
  - executing the executable statement on the given database connection and returning any results of executing the executable statement.
2. (Currently amended) The method of claim 1, wherein said preparing comprises preparing a structure for execution of the database statement against a database.

3. (Currently amended) The method of claim 2, wherein said structure comprises an executable structure for executing the database statement on a database connection.
13. (Currently amended) The method of claim 12 wherein said determining includes using said unique identifier to determine whether a template is available in the shared cache.
16. (Currently amended) The method of claim 1, wherein said creating includes reusing immutable portions of a template.
17. (Currently amended) The method of claim 1, wherein said creating includes duplicating mutable portions of a template.
20. (Currently amended) The method of claim 1, wherein said creating includes attaching the database statement to the given database connection.
22. (Currently amended) A computer-readable storage medium having processor-executable instructions for performing the method of claim 1.
24. (Currently amended) A system for executing a database statement, the system comprising:
- at least one template for generating an executable statement for execution against a database;

a shared cache located in a middle tier for storing the at least one template attached to a first database connection so that the at least one template is available to a plurality of database connections, such that memory requirements of said shared cache are proportional to how many templates exist, regardless of how many executable statements are generated;

a locator module for locating a first template corresponding to a particular statement in the shared cache in response to a request to execute the particular statement on a second database connection and determining whether the first template for the particular statement is available in the shared cache;

a module for preparing a second template for execution of the particular statement and placing the second template in the shared cache if the locator module determines that the first template is unavailable;

a cloning module for cloning the first template to create an executable database statement for execution once the first template is available in the shared cache and the executable database statement having been prepared for execution on the second database connection;

module for executing the executable database statement on the second database connection and returning any results of executing the executable database statement.

***Allowable Subject Matter***

3. Claims 1-6, 8, 10-20, 22-29, 31, 33-41 are allowed.

The prior art of record, alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim 1, wherein “storing the at least one template in a shared cache at an application server so that the at least one template is available to a plurality of database connections, such that memory requirements of the shared cache are proportional to how many templates exist, regardless of how many executable statements are generated; if the first template is unavailable in the shared cache, preparing a second template for execution of the particular statement against the database and placing the second template in the shared cache; once the first template is available in the shared cache, creating a corresponding executable statement based on the first template”; and

The prior art of record, alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim 24, wherein “shared cache located in a middle tier for storing the at least one template attached to a first database connection so that the at least one template is available to a plurality of database connections, such that memory requirements of said shared cache are proportional to how many templates exist, regardless of how many executable statements are generated; a module for preparing a second template for execution of the particular statement and placing the second template in the shared cache if the locator module determines that the first template is unavailable; a cloning module for cloning the first template to create an executable database statement for execution when the first template is available in the shared cache”.

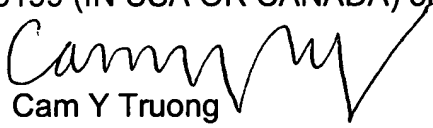
The dependent claims, bring definite, further limiting, and fully enabled by the specification are also allowed.

**Contact Information**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Cam Y Truong  
Primary Examiner  
Art Unit 2162  
9/28/2006